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EXAMINER	
SALL, EL HADJI MALICK	

ART UNIT	PAPER NUMBER
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,095	SCOTT ET AL.	
	Examiner	Art Unit	
	El Hadji M Sall	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. ***DETAILED ACTION***

This action is responsive to the application filed on April 30, 2001. Claims 1-10 and 14-18 are pending. Claims 1-10 and 14-18 represent method for adapting a characteristic of a call server. Claims 11-13 are cancelled.

2. ***Claim Rejections - 35 USC § 112***

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the topology" in lines 2. There is insufficient antecedent basis for this limitation in the claim. For purpose of prior art rejection in this office action, examiner presumes "a topology".

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the available bandwidth" in lines 2. There is insufficient antecedent basis for this limitation in the claim. For purpose of prior art rejection in this office action, examiner presumes "an available bandwidth".

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "the type" in lines 2. There is insufficient antecedent basis for this limitation in the claim. For purpose of prior art rejection in this office action, examiner presumes "a type".

3. ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-X are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaid et al. U.S. 6,502,131in view of Marques et al. U.S. 6,643,706.

Vaid teaches the invention substantially including directory enabled policy management tool for intelligent traffic management (see abstract).

As to claim 1, Vaid teaches a method of adapting a routing algorithm used by a call server connected to a communications network comprising the steps of:

detecting a change in at least one condition of the communications network (column 10, lines 29-35, Vaid discloses network infrastructure management involves a continuous process of monitoring, reporting, and deploying changes to match network growth or changing needs in a growing office, for example. These changes exist at various levels and time scales. As merely examples, the network changes can be to enforce a QoS Policy for a critical service; column 11, lines 6-12, Vaid discloses multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network);

analyzing the change to determine whether the routing algorithm requires adaptation to accommodate said change (column 11, lines 37-40, Vaid discloses the

present tool can also be used with network stress testing tools to obtain detailed analysis of flows and traffic behavior); and

receiving the indication at the calls server and adapting the routing algorithm used by the server in response to said indication (column 6, lines 2-4, Vaid discloses Packet loss is usually an indication of severe congestion, overload of an element, or element failure; figure 16, item 1629; figure 7, item 705); and

the call server (16, item 1629).

Vaid fails to teach in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation.

However, Marques teaches scalable route redistribution mechanism. Marques teaches in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation (column 3, lines 32-36, Marques discloses providing an indication regarding which of those entries have been processed by a given process (or, equivalently, which entries have not been processed), the given process can determine which entries require processing without the aforementioned buffering).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation to the call server. One would be motivated to do so to allow profiling of incoming and outgoing information from one of the information sources (see abstract).

As to claim 2, Vaid teaches a method as claimed in claim 1.

Vaid fails to teach the step of providing an indication of the required adaptation, the indication provides an indication of at least one rule governing the routing algorithm which is to be adapted.

However, Marques teaches wherein in the step of providing an indication of the required adaptation, the indication provides an indication of at least one rule governing the routing algorithm which is to be adapted (abstract, Marques discloses...the first

process uses the indication to decide which of the entries requiring processing the process...; figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide the step of providing an indication of the required adaptation, the indication provides an indication of at least one rule governing the routing algorithm which is to be adapted. One would be motivated to do so to allow a network connection between a number of network elements (see abstract).

As to claim 3, Vaid teaches a method as claimed in claim 1, wherein in the step of analyzing the change in condition, the change in the level of congestion over the network is analyzed (column 11, lines 16-18, Vaid discloses he tool manages time of day congestion, and responds to intermittent problems or perceived problems; column 11, lines 25-27, Vaid discloses The tool analyzes traffic usage performance patterns, what services or hosts are active on the network, and troubleshoots chronic problems).

As to claim 5, Vaid teaches a method as claimed in claim 1, wherein the step of analyzing the change in condition, the change in an available bandwidth over at least a portion of the network is analyzed (column 15, lines 61-67, Vaid discloses the properties of different applications being used, whether they utilize lots of bandwidth or not. The user may also need to account for the type of files commonly downloaded by users or from the Web site. Measure and analyze traffic using the present tool's profiles. Additionally, monitoring of selected entities (e.g., users, services) may also be useful).

As to claim 6, Vaid teaches a method as claimed in claim 1, wherein the step of analyzing said changes is performed and the step of providing the indication occur dynamically (column 23, lines 38-43, Vaid discloses teach Some functions include: Dynamic traffic and policy analysis; utilizing active monitoring of devices or probing of the network; Translates policies into dynamic actions that are communicated to

enforcement devices via a policy exchange protocol or a standard network management protocol, e.g., SNMP, TELNET).

As to claim 8, Vaid teaches a method as claimed in claim 1, wherein at least one condition occurs on the packet backbone of the communications network (column 7, lines 15-19, Vaid discloses The client ISP carrier and the server ISP carrier may both be connected by an ATM backbone or the like. Because of this asymmetry in this embodiment, any traffic management solution should take into account these variations including traffic speed and data format described above).

As to claim 9, Vaid teaches a method as claimed in claim1, wherein the method enables the call server to use available network resource more efficiently (column 5, lines 1-5, Vaid discloses A set of techniques or mechanisms including policies that can be applied in a network to manage limited network resources such as bandwidth and the like. These techniques are intended to improve overall network performance and efficiency; column 24, lines 41-43, Vaid discloses The backbone switch is connected to a variety of elements such as policy services 1627, IP call server 1629).

As to claim 10, Vaid teaches a method as claimed in claim 1, wherein the step of detecting a change in the condition of the communications network, a type of traffic affected is determined, wherein the type of data is determined by the bandwidth of the data (column 11, lines 3-11, Vaid discloses the tool ensures that critical or more important traffic gets a right of way during traffic bursts and provides bandwidth enforcement. Multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network).

As to claim 14, Vaid teaches a network management element capable of determining a condition of a communications network and capable of communicating

said condition with a call server connected to the network for use in a method of adapting a routing algorithm used by a call server connected to a communications network, the method comprising the steps of:

detecting a change in at least one condition of the communications network (column 10, lines 29-35, Vaid discloses network infrastructure management involves a continuous process of monitoring, reporting, and deploying changes to match network growth or changing needs in a growing office, for example. These changes exist at various levels and time scales. As merely examples, the network changes can be to enforce a QoS Policy for a critical service; column 11, lines 6-12, Vaid discloses multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network);

analyzing the change to determine whether the routing algorithm requires adaptation to accommodate said change (column 11, lines 37-40, Vaid discloses the present tool can also be used with network stress testing tools to obtain detailed analysis of flows and traffic behavior);

receiving the indication at the call server and adapting the routing algorithm used by the call server in response to said indication, the network management element being adapted to correlate information received from a packet backbone network relating to the condition of the network with an instruction set comprising at least one informational element, each informational element providing an instruction to a call server to modify at least one of the characteristics of the call server so as to optimize the manner in which the call server utilizes the available resources of the packet backbone network (column 6, lines 2-4, Vaid discloses Packet loss is usually an indication of severe congestion, overload of an element, or element failure; column 7, lines 15-19, Vaid discloses The client ISP carrier and the server ISP carrier may both be connected by an ATM backbone or the like. Because of this asymmetry in this embodiment, any traffic management solution should take into account these variations

including traffic speed and data format described above; figure 16, item 1629; column 5, lines 1-5, Vaid discloses A set of techniques or mechanisms including policies that can be applied in a network to manage limited network resources such as bandwidth and the like. These techniques are intended to improve overall network performance and efficiency; column 24, lines 41-43, Vaid discloses The backbone switch is connected to a variety of elements such as policy services 1627, IP call server 1629; figure 7, item 705); and

the call server (figure 16, item 1629).

Vaid fails to teach in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation.

However, Marques teaches in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation (column 3, lines 32-36, Marques discloses providing an indication regarding which of those entries have been processed by a given process (or, equivalently, which entries have not been processed), the given process can determine which entries require processing without the aforementioned buffering).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation to the call server. One would be motivated to do so to allow profiling of incoming and outgoing information from one of the information sources (see abstract).

As to claim 15, Vaid teaches a call server adapted for use in a method of adapting a routing algorithm used by the call server connected to a communication network, the method comprising the steps of:

detecting a change in at least one condition of the communications network (column 10, lines 29-35, Vaid discloses network infrastructure management involves a continuous process of monitoring, reporting, and deploying changes to match network growth or changing needs in a growing office, for example. These changes exist at

various levels and time scales. As merely examples, the network changes can be to enforce a QoS Policy for a critical service; column 11, lines 6-12, Vaid discloses multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network);

analyzing the change to determine whether the routing algorithm requires adaptation to accommodate said change (column 11, lines 37-40, Vaid discloses the present tool can also be used with network stress testing tools to obtain detailed analysis of flows and traffic behavior); and

receiving the indication at the calls server and adapting the routing algorithm used by the server in response to said indication (column 6, lines 2-4, Vaid discloses Packet loss is usually an indication of severe congestion, overload of an element, or element failure; figure 16, item 1629; figure 7, item 705)); and

the call server (16, item 1629).

Vaid fails to teach a receiving element for interfacing with said indication.

However, Marques teaches scalable route redistribution mechanism. Marques teaches a receiving element for interfacing with said indication (figure 7, item 700).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide a receiving element for interfacing with said indication. One would be motivated to do so to allow maintaining a number of entries (see abstract).

Vaid fails to teach a processing element for processing information provided by said indication.

However, Marques teaches a processing element for processing information provided by said indication (figure 7, item 710).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide a processing element for

processing information provided by said indication. One would be motivated to do so to allow a network connection between a number of network element (see abstract).

Vaid fails to teach a routing algorithm adapting element for adapting said routing algorithm.

However, Marques teaches a routing algorithm adapting element for adapting said routing algorithm (figure 7, item 720).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide a routing algorithm adapting element for adapting said routing algorithm. One would be motivated to do so to allow a network connection between a number of network elements (see abstract).

Vaid fails to teach in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation.

However, Marques teaches in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation (column 3, lines 32-36, Marques discloses providing an indication regarding which of those entries have been processed by a given process (or, equivalently, which entries have not been processed), the given process can determine which entries require processing without the aforementioned buffering).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation to the call server. One would be motivated to do so to allow profiling of incoming and outgoing information from one of the information sources (see abstract).

As to claim 16, Vaid teaches a routing algorithm for a call server adapted for use in a method of adapting a routing algorithm used by a call server connected to a communications network, the method comprising the steps of:

detecting a change in at least one condition of the communications network (column 10, lines 29-35, Vaid discloses network infrastructure management involves a continuous process of monitoring, reporting, and deploying changes to match network

growth or changing needs in a growing office, for example. These changes exist at various levels and time scales. As merely examples, the network changes can be to enforce a QoS Policy for a critical service; column 11, lines 6-12, Vaid discloses multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network);

analyzing the change to determine whether the routing algorithm requires adaptation to accommodate said change (column 11, lines 37-40, Vaid discloses the present tool can also be used with network stress testing tools to obtain detailed analysis of flows and traffic behavior); and

receiving the indication at the calls server and adapting the routing algorithm used by the server in response to said indication (column 6, lines 2-4, Vaid discloses Packet loss is usually an indication of severe congestion, overload of an element, or element failure; figure 16, item 1629, figure 7, item 705); and

the call server (16, item 1629).

Vaid fails to teach the routing algorithm operable in accordance with a set of rules which determine route selection over a communication network, at least one rule capable of being adapted in response to the call server receiving an indication relating to the adaptation of the said at least one rule.

However, Marques teaches the routing algorithm operable in accordance with a set of rules which determine route selection over a communication network, at least one rule capable of being adapted in response to the call server receiving an indication relating to the adaptation of the said at least one rule (abstract, Marques discloses...the first process uses the indication to decide which of the entries requiring processing the process...; figure 7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide the routing algorithm operable in accordance with a set of rules which determine route selection over a communication

network, at least one rule capable of being adapted in response to the call server receiving an indication relating to the adaptation of the said at least one rule. One would be motivated to do so to allow a network connection between a number of network elements (see abstract).

Vaid fails to teach in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation.

However, Marques teaches scalable route redistribution mechanism. Marques teaches in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation (column 3, lines 32-36, Marques discloses providing an indication regarding which of those entries have been processed by a given process (or, equivalently, which entries have not been processed), the given process can determine which entries require processing without the aforementioned buffering).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation to the call server. One would be motivated to do so to allow profiling of incoming and outgoing information from one of the information sources (see abstract).

As to claim 17, Vaid teaches a routing algorithm as in claim16.

Vaid fails to teach the rules may be adapted differently for different types of data.

However, Marques teaches the rules may be adapted differently for different types of data (column 15, lines 10-11, Marques discloses once a change in routing table 240 is detected, the type of change is examined to determined how to proceed).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide the rules may be adapted differently for different types of data. One would be motivated to do so to allow the entries requiring processing the process to be processed (see abstract).

As to claim 18, Vaid teaches communication network having means to modify a characteristic of a call server for use in a method of adapting a routing algorithm used by a call server connected to a communications network, the method comprising the steps of:

detecting a change in at least one condition of the communications network (column 10, lines 29-35, Vaid discloses network infrastructure management involves a continuous process of monitoring, reporting, and deploying changes to match network growth or changing needs in a growing office, for example. These changes exist at various levels and time scales. As merely examples, the network changes can be to enforce a QoS Policy for a critical service; column 11, lines 6-12, Vaid discloses multiple users of the network at a specific time can cause the traffic burst. Alternatively, multiple sessions on the network at a specific time can cause the traffic burst. Once the traffic burst is detected, the tool has a control device, which provides bandwidth enforcement to ensure that the more important traffic gets through the network);

analyzing the change to determine whether the routing algorithm requires adaptation to accommodate said change (column 11, lines 37-40, Vaid discloses the present tool can also be used with network stress testing tools to obtain detailed analysis of flows and traffic behavior);

receiving the indication at the calls server and adapting the routing algorithm used by the server in response to said indication (column 6, lines 2-4, Vaid discloses Packet loss is usually an indication of severe congestion, overload of an element, or element failure; figure 16, item 1629; figure 7, item 705); and

the call server (16, item 1629).

Vaid fails to teach in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation.

However, Marques teaches scalable route redistribution mechanism. Marques teaches in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation (column 3, lines 32-36, Marques discloses providing an indication regarding which of those entries have been processed by a

given process (or, equivalently, which entries have not been processed), the given process can determine which entries require processing without the aforementioned buffering).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Marques to provide in the case of the routing algorithm requiring adaptation, providing an indication of the required adaptation to the call server. One would be motivated to do so to allow profiling of incoming and outgoing information from one of the information sources (see abstract).

5. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaid et al. U.S. 6,502,131in view of Jacobs U.S. 5,761,502..

Vaid teaches the invention substantially including directory enabled policy management tool for intelligent traffic management (see abstract).

As to claim 4, Vaid teaches a method as claimed in claim 1.

Vaid fails to teach in the step of analyzing the change in condition, the change in the topology of the network is analyzed.

However, Jacobs teaches system and method for managing a telecommunications network by associating and correlating network events. Jacobs teaches the change in a topology of the network (column 8, lines 64-67, Jacobs discloses as changes to the design of Network 202 are implemented, the data in Network Topology Database 322 and Network Routing Database 324 are changed to reflect the new design).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Jacobs to provide in the step of analyzing the change in condition, the change in a topology of the network is analyzed. One would be motivated to do so to allow the management of network elements (see abstract).

As to claim 7, Vaid teaches a method as claimed in claim 1.

Vaid fails to teach the step of analyzing said change includes assessing the impact of the change in the at least one condition on a future condition of the network.

However, Jacobs teaches the step of analyzing said change includes assessing the impact of the change in the at least one condition on a future condition of the network (column 12, lines 32-35, Jacobs discloses Expert System 326 reads the notification message and applies the appropriate rules to assess the impact of the state change, as well as to associate or correlate this state change with other state changes).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaid in view of Jacobs to provide the step of analyzing said change includes assessing the impact of the change in the at least one condition on a future condition of the network. One would be motivated to do so to allow the management of network elements (see abstract).

6. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to El Hadji M Sall whose telephone number is 703-306-4153. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703 308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

El Hadji Sall
Patent Examiner
Art Unit: 2157

SALEH NAJJAR
PRIMARY EXAMINER